

	Type	Hits	Search Text	DBs	Time Stamp	Error Comments
1	IS&R	410	(164/457).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 14:12	0
2	IS&R	102	(164/155.2).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 10:35	0
3	IS&R	442	(164/4.1).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 10:36	0
4	IS&R	306	(164/119).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 12:43	0
5	IS&R	338	(164/306).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 13:10	0
6	IS&R	482	(164/133).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 13:45	0
7	IS&R	145	(164/135).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 13:50	0
8	IS&R	330	(164/136).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 13:50	0
9	IS&R	279	(164/335).CCLS.	USPAT; US-PGPUB; EP ; JP ; DERWENT	2003/01/03 14:24	0

	Type	Hits	Search Text	DBs	Time Stamp	Err Co m m e n t s	Er r o r s
10	IS&R	633	(164/337).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/01/03 14:24		0

	Type	Hits	Search Text	DBs	Time Stamp	Errors	Comments
11	IS&R	69	("2847739") or ("3302254") or ("3425483") or ("3768542") or ("2990592") or ("3196501") or ("3302253") or ("3532154") or ("4008749") or ("4047558") or ("4085791") or ("4213494") or ("3861457") or ("4050503") or ("4252173") or ("3842893") or ("4030538") or ("4714102") or ("4860820") or ("4967827") or ("4671342") or ("5178009") or ("5597032") or ("3951199") or ("4143687") or ("5022458") r ("5205346") r ("5385200") r ("5111871") or ("5188164") or ("5224533") r ("5241701")	USPAT	2003/01/03 14:53	0	

## WEST Search History

DATE: Friday, January 03, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
	<i>DB=JPAB,EPAB,DWPI; PLUR=YES; OP=OR</i>		
L22	((((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and pressure	81	L22
L21	((((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and pressure and (signal or control\$3 or measur\$3 or transducer)	44	L21
L20	((((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and pressure and time and (signal or control\$3 or measur\$3 or transducer)	18	L20
L19	((((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and ((pressure near10 time) near20 (signal or control\$3 or measur\$3 or transducer))	1	L19
	<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR</i>		
L18	((((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and ((pressure near10 time) near20 (signal or control\$3 or measur\$3 or transducer))	41	L18
	<i>DB=USPT; PLUR=YES; OP=OR</i>		
L17	13 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and ((pressure near10 time) near20 (signal or control\$3 or measur\$3 or transducer))	34	L17
L16	13 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and ((pressure near20 time) near20 (signal or control\$3 or measur\$3 or transducer))	41	L16
L15	13 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and ((pressure near20 time) near50 (signal or control\$3 or measur\$3 or transducer))	42	L15
L14	13 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and ((pressure near20 time) near50 (signal or control\$3))	40	L14
L13	13 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and (pressure near20 time) and (signal or control\$3)	125	L13
L12	13 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and pressure and time and (signal or control\$3)	389	L12
L11	13 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and ((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and pressure and time	436	L11

}  
L10 l3 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and  
((velocity or rate) near20 (fill\$3 or pour\$3)) and mold and pressure 477 L10  
L9 l3 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and  
((velocity or rate) near20 (fill\$3 or pour\$3)) and mold 688 L9  
L8 l3 and (((molten or liquid) near3 metal) near10 (fill\$3 or pour\$3)) and  
mold 3569 L8  
L7 l3 and (((molten or liquid) near3 metal) near20 (fill\$3 or pour\$3)) and  
mold 3655 L7  
L6 l3 and ((molten or liquid) near3 metal) and mold and (fill\$3 or  
pour\$3) 4925 L6  
L5 l3 and ((molten or liquid) near3 metal) and mold 5991 L5  
L4 l3 and ((molten or liquid) near3 metal) 7711 L4  
L3 l1 or l2 99535 L3  
L2 (((222/\$)![CCLS])) 74260 L2  
L1 ((164/\$)![CCLS]) 26034 L1

END OF SEARCH HISTORY

**WEST**

Generate Collection

Print

L20: Entry 5 of 18

File: JPAB

Apr 20, 1993

PUB-NO: JP405096356A

DOCUMENT-IDENTIFIER: JP 05096356 A

TITLE: METHOD AND APPARATUS FOR PRESSURE CONTROLLED CASTING

PUBN-DATE: April 20, 1993

## INVENTOR-INFORMATION:

NAME

COUNTRY

MINAMI, NORIO

HAMA, YASUO

WATANABE, HIROSHI

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

HITACHI METALS LTD

APPL-NO: JP03257937

APPL-DATE: October 4, 1991

US-CL-CURRENT: 164/119; 164/306

INT-CL (IPC): B22D 18/06; B22D 39/06; B22D 21/04

## ABSTRACT:

PURPOSE: To obtain a high quality casting by making rising velocity of the differential pressure comparatively slow at the time of starting filling-up of molten metal into a cavity in a mold and successively, adding the differential pressure to a feeder head after the completion of the filling-up confirms with a detecting means arranged at the last filling part in the cavity.

CONSTITUTION: The atmospheric pressures in a holding furnace 1 in a pressure vessel 2 and in the mold 5 are independently controlled and the molten metal in the holding furnace 1 is filled up into the cavity in the mold 3 through a stoke 5 with the differential pressure. At the time of starting the filling-up of the molten metal into the cavity, the rising velocity of the differential pressure is made to comparatively slow, and after the completion of the filling-up confirms with the detecting means S for the filling-up of the molten metal arranged at the last filling part in the cavity, successively the differential pressure for feeder head is added. By this method, the change-over timing from the pressurization for filling up to the pressurization for feeder head is made to suitable, and as the molten metal is filled up in so comparatively slow velocity as not to develop the disturbance of the molten metal and entrapping of gas in the cavity, the high quality casting can be obtd.

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**CLIPPEDIMAGE= JP403155447A**

**PAT-NO: JP403155447A**

**DOCUMENT-IDENTIFIER: JP 03155447 A**

**TITLE: METHOD AND INSTRUMENT FOR DETECTING  
ABNORMALITY IN LOW PRESSURE CASTING  
METHOD**

**PUBN-DATE: July 3, 1991**

**INVENTOR-INFORMATION:**

**NAME**

**ANAMI, MASA HARU**

**ASSIGNEE-INFORMATION:**

**NAME**

**TOYOTA MOTOR CORP**

**COUNTRY**

**N/A**

**APPL-NO: JP01291110**

**APPL-DATE: November 10, 1989**

**INT-CL (IPC): B22D018/04;B22D018/08 ;B22D046/00**

**US-CL-CURRENT: 164/119,164/150.1 ,164/151 ,164/306**

**ABSTRACT:**

**PURPOSE: To prevent damage, etc., in a low pressure casting  
machine by  
obtaining tolerance in heating air flow rate at the next casting  
cycle,**

comparing the pressurized air flow rate at the time of actually pressurizing with the above flow rate and detecting whether the pressurized air leaks or not.

**CONSTITUTION:** The pressurized air flow rate for pushing up molten metal 3 is measured with flow rate measuring means 21. Based on the flow rate in the same casting cycle, the tolerance in the pressurized air flow rate at the next casting cycle is obtained with arithmetic means 23. The pressurized air flow rate at the time of actually pressurizing in the next casting cycle and the tolerance in the pressurized air flow rate obtained with the arithmetic means 23 are compared with decision means 24 to detect whether the pressurized air leaks or not. By this method, the product having high quality can be manufactured.

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